

REMARKS

Claims 1-80 were examined in the outstanding office action mailed on 12/26/2008 (hereafter "Outstanding Office Action"). All claims were rejected. By virtue of this response, claims 1-3, 5-6, 8-13, 16-18, 21-43, 45-46, 48-53, 56-58, 61-63, 65-66, 68-73, and 76-78 have been amended. The amendments are believed not to add any new subject matter

CLAIM OBJECTIONS

Claims 11, 31, 51, and 71 were objected to because of the dash (-) used to indicate a subtraction operation. Claims 11, 31, 51, and 71 have been corrected appropriately and overcome the above objections.

Withdrawal of objections is respectfully requested.

CLAIM REJECTIONS – 35 USC § 101

Claims 21-40 were rejected under 35 USC § 101 for being directed to non-statutory subject matter. As suggested in the Office Action, claims 21-40 have been amended to recite, "computer readable storage medium" and are believed to meet the statutory subject matter requirement of 35 USC § 101.

Withdrawal of rejection of claims 21-40 under 35 USC § 101 is respectfully requested.

CLAIM REJECTIONS – 35 USC § 112

Claims 1-80 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter.

Claims 1, 21, 41, and 61 as amended, recite, "indicating in said computer system that said first order be promised" and meet the requirements of 35 U.S.C. § 112, second paragraph.

Claims 5, 8, 11, 13, 16, 17, 18, 25, 28, 31, 33, 36, 37, 38, 45, 48, 51, 53, 56, 58,

65, 68, 71, 73, 77, and 78 as amended do not contain any limitations in parenthesis () and meet the requirements of 35 U.S.C. § 112, second paragraph.

Withdrawal of rejections of claims 1-80 under 35 U.S.C. § 112, second paragraph
5 is respectfully requested.

CLAIM REJECTIONS – 35 USC § 102

Claims 1-4, 9-10, 12, 21-24, 29-30, 32, 41-44, 49-50, 52, 61-64, 69-70, and 72
are rejected under 35 USC § 102(b) as being anticipated by Greamo *et al* (US
10 2002/0095307).

Without acquiescing to any of the Examiner's assertions, it is asserted that the presented claims are allowable over Greamo. In particular, Applicants first assert that amended claim 1 is not anticipated by Greamo.

15 Claim 1 recites:

A method of processing orders related to a family of products in a supply chain management system, said family of products containing a plurality of member items, said plurality of member items having similarities in resource requirements, said method comprising:

20 **receiving in a computer system a time fence (TF) duration associated with each of said plurality of member items in pair with a first member item**, wherein said first member item is also contained in said plurality of member items of said family, wherein said TF duration associated with a member item in pair with said first member item represents an amount of advance time duration after which the supply of that member item is available to satisfy the demand for said first member item;

25 receiving in said computer system a first order specifying a first required quantity of said first member item and a first required date, wherein said first required date is after said TF duration from a time said first order is received, and wherein only Qavail units of said first member item are scheduled to be available as of said first required date, wherein Qavail is less than said first required quantity;

30 **determining in said computer system a first available quantity of all of said plurality of member items scheduled to be available after said TF duration and as of said first required date, and a second available quantity of said first member item scheduled to be available as of end of said TF duration; and**

35 **indicating in said computer system that said first order be promised if said determining determines that said first available quantity and said second available quantity scheduled to be available as of said first**

required date is sufficient to fulfill said first required quantity. (Emphasis Added)

Currently amended independent claim 1 above recites a method for processing
5 orders related to a family of products that contain a plurality of member items that have
similarities in their resource requirements. Claim 1 recites a first order received for a first
required quantity of a first member item (of the family of products) on a first required
date. The method of claim 1 includes a time fence (TF) duration for each member item in
pair with the first member item, where the TF duration for a pair of member items (the
10 pair including the first member item and another member item of the family of products)
represents an amount of advance time duration after which the supply of that another
member item in the pair is available to satisfy the demand for the first member item.

This TF duration allows the features of claim 1 to take advantage of the
15 similarities in the resource requirements of the member items of the family of products in
satisfying a demand.

From claim 1, whether the received first order of the first member item can be
fulfilled, is determined based on both a) the available quantity of the first member item
20 itself as of the end of the TF duration, i.e., the second available quantity, and b) the
available quantity of all of the member items in the family of products (that have
similarities in resource requirements) after the TF duration and as of the first required
date, i.e., the first available quantity. If it is determined that sufficient quantities of both
first available quantity and second available quantity are scheduled to be available to
25 fulfill the first required quantity as of the first required date then the system indicates that
the order can be promised.

Greamo does not teach or reasonably suggest such a feature.

30 Greamo is related to a system and method for inventory and capacity availability
management and particularly for managing inventory so as to coordinate the providing of
desired goods, or suitable alternatives therefore, in response to an order from a customer.
Greamo also provides a method using which; a user with proper permissions to access a
supply chain may check the availability of an item within the supply chain network.
35 (Paragraphs 0002 and Abstract of Greamo).

However, Greamo does not disclose a system and method that involves a family of products, a method for processing orders related to a family of products as in claim 1 and definitely does not determine and use availability of all member items of the family of products in order to determine whether the order received for a member item in the family of products can be promised.

Additionally, Greamo does not teach the computation employed in determining the availability of an item to the extent of computation recited in claim 1 and its dependent claims. Greamo merely suggests that a user can check availability of an item within the supply chain network and suggests using factors such as alternate sourcing and plants, alternate raw material suppliers, etc., to suggest a promise date for the order (Abstract and paragraph 0021 of Greamo).

Applicants submit that several features of claim 1 above are not taught or reasonably suggested by Greamo.

The Office Action alleges that paragraphs 0013 of Greamo teaches the preamble of claim 1; paragraphs 0031, 0032, 0021, 0022, and 0016 of Greamo teach the “receiving in a computer system a time fence (TF) duration” feature of claim 1; paragraphs 0013, 0043, and 0021 of Greamo teach the “receiving in said computer system a first order” feature of claim 1; paragraphs 0021, 0044-0046, and 0041 of Greamo teach the “determining” and “indicating in said computer system that said first order be promised” features of claim 1. Applicants respectfully disagree. For example:

Paragraph 0013 of Greamo is alleged as teaching the preamble of claim 1:

(Paragraph 0013 of Greamo)

In use, a user (such as an account manager or a customer relationship manager) can determine whether it would be possible to run a product promotion for an account without changing current business obligations (i.e., defaulting on other delivery agreements). In order to ensure that a promotion does not interfere with the current business plan (shipping commitments, current orders, etc.), the user uses the availability system to query what inventory is available for the items involved in the promotion. In order to make such queries in embodiments of the present invention, the user specifies what type of promotion he wishes to perform by entering a combination of the following information: (1) the product or item, (2) location (optional, used if querying for a particular SKU), (3) begin date (optional, only used if

checking inventory available to promise or capable to
promise), (4) duration, given in days (optional, only
used if checking available to promise or capable to
promise), and (5) bucket (e.g., daily, weekly, or
monthly)
(Paragraph 0013 of Greamo)

Paragraph 0013 of Greamo is related to a product promotion plan and using the
availability system to query what inventory is available for the items involved in the
promotion. The paragraph does not teach or reasonably suggest a method to process
orders specifically related to a family of products where the member items of the family
of products have similarities in resource requirements.

Paragraphs 0031, 0032, 0021, 0022, and 0016 of Greamo are alleged as teaching
the “receiving in a computer system a time fence (TF) duration” feature of claim 1. It is
now shown that none of these paragraphs, either alone or in combination, teach or
reasonably suggest such a feature. In particular, paragraph 0016 of Greamo discloses:

(Paragraph 0016 of Greamo)
Once allocations are committed, consumption against them
can be tracked at all levels in the supply chain, thus
providing the necessary visibility to proactively manage
an intricate trading network. The present invention
satisfies the need for global, item-level visibility of
the inventory resources throughout an entire supply chain
so as to identify and provide for inventory constraints
and reduce failures to deliver on time. Companies in
various industries, such as retail, high-tech, consumer
packaged goods, etc., need a single source for viewing
the status of the user's entire trading network... The
ability to view the progress and history of items and
orders in the user's trading network increases the user's
ability to make dynamic sourcing and delivery decisions,
increase or decrease order quantities or safety stock
levels, and redirect critical inventory, whether in-house
or in-route... (Paragraph 0016 of Greamo)

This paragraph of Greamo describes providing a global and item level view of a
company's entire trading network to proactively manage the network. The paragraph
describes providing the user with ability to view the progress and history of items and
orders, ability to make dynamic sourcing and delivery decisions, increase or decrease
order quantities, redirect critical inventory, etc. The paragraph includes terms such as
dynamic sourcing but has no additional teaching on what the dynamic sourcing involves,
specifically, there is no teaching or reasonable suggestion that the dynamic sourcing is
associated with a concept such as the TF duration of claim 1.

None of the operations listed in this paragraph is disclosed or suggested as being based on the concept of TF duration of claim 1. Accordingly, Applicants submit that this paragraph has no teaching or reasonable suggestion of a TF duration associated with a member item in pair with a first member item and representing an amount of advance time duration after which the supply of that member item is available to satisfy the demand for said first member item and where both the member item and the first member item of the pair are members of a family of products that have similarities in resource requirements represents.

(Paragraph 0021 and 0022 of Greamo)

[0021] As illustrated in FIGS. 1A-B, the present invention provides a commit system 100 that provides a real-time solution for promising and committing to customer requests. Unlike typical available-to-promise (ATP) solutions, which assume that manufactured product can be delivered as requested, commit system 100 considers the actual constraints of the entire enterprise. **When an order is generated, commit system 100 checks the availability of all related inventory and resources in real time. Factors considered include alternate distribution centers, planned production, capable production, alternate sourcing and plants, and alternate raw material suppliers.** The commit system 100 only suggests a promise date after evaluating these factors.

[0022] Given a need date, the commit system 100 searches whether there is inventory at any given place to meet the order. **If inventory is not readily available, then the commit system 100 considers all lead times and capacities to determine when the order can be available to the customer.** In this search it looks at:

[0023] 1. existing inventories of raw materials, components, work in progress and finished goods;
[0024] 2. projected production plan and purchases of various materials;

[0025] 3. **lead times for raw materials, moving within locations, manufacturing lead times, transportation lead times,** etc.; and

[0026] 4. available spare capacity in the resources. Because of the design of the commit system 100, it can access multiple ordering channels (web, order management system, telephone sales, etc.) so that the entire enterprise is running off the same information. The operation of the commit system 100 is described in greater detail below.

(Paragraph 0021 and 0022 of Greamo, **Emphasis Added**)

Paragraphs 0021 and 0022 of Greamo do not disclose the concept of TF duration as recited in claim 1. The only time related concept described in these paragraphs is lead time, which is related to the lead time for **raw materials moving within locations, manufacturing and transportation lead times**. For lack of definition of lead time in Greamo, it seems reasonable to interpret in view of accompanying description in Greamo,

that this lead time is time taken for moving raw materials from one location to the other, time taken for manufacturing or time taken for transportation of raw material/inventory. This lead time is **not equivalent to the TF duration** of claim 1 according to which the TF duration associated with a member item in pair with a first member item represents an amount of advance time duration after which the supply of that member item is available to satisfy the demand for the first member item, wherein, the first member item and second member item are members of a family of products that have similarities in their resource requirements.

Further, the above paragraphs of Greamo suggest that when a order is generated the commit system 100 considers factors such as alternate sourcing and plants, and alternate raw material suppliers but do not go into the details of these alternate sources or their relationship with the ordered item, specifically, Greamo does not teach a method that enables processing orders for one member item of a family of products by considering supply of all member items in the family of products as in claim 1.

(Paragraphs 0031 and 0032 of Greamo)

0031] Returning to FIGS. 1A-B, the commit system 100 further includes a statistics applet 150 that collects two kinds of data from a running server: operational statistics and business statistics. The commit server 110 tracks statistics as it processes order transactions and displays this information on the operational statistics page. It also tracks statistics by order status and displays this information on a business statistics page. [0032] The commit database 160, illustrated in FIGS. 1A-B, stores a record of the user's supply chain formed. Specifically, the database typically stores a record of locations in the supply chain, items in the supply chain, the items at each location (stock keeping unit or SKUs), the inventory number of each SKU, processes effecting each SKU (such as sales or replenishments), transportation lanes between the location, costs required to store each SKU, and costs to move each SKU in a transportation lane..

(Paragraphs 0031 and 0032 of Greamo)

These paragraphs 0031 and 0032 of Greamo describe operational and business statistics and displaying these statistics on their respective pages and additionally describe storing in the database information such as locations and items in the supply chain, inventory number, etc., such that the commit system may rapidly access and modify the supply chain data. None of these paragraphs appear to teach or reasonably suggest the TF duration as recited in claim 1.

Paragraphs 0021, 0044-0046, and 0041 of Greamo are alleged as teaching the “determining” and “promising” features of previously presented claim 1. According to the currently amended features of claim 1, specifically, the “determining” and “indicating in said computer system that said first order be promised” features of claim 1, a first
5 available quantity of all plurality of member items (of the family of products) that are scheduled to be available after the TF duration and as of the first required date and a second available quantity of the first member item (for which the first order has been received) scheduled to be available as of the end of TF duration are determined.

10 If it is determined in the computer system that both the first available quantity and second available quantity scheduled to be available as of the first required date are sufficient to fulfill the first required quantity (of the first order) then it is indicated in the computer system that the first order can be promised. Thus, availability of all the plurality of member items of the family of products to which the first member item belongs, is also
15 considered in order to determine whether the first order for the first member item can be promised. Greamo does not disclose such features.

Paragraph 0021 of Greamo, as discussed earlier, only suggests that when an order is generated, the commit system 100 considers factors such as alternate sourcing and
20 plants, and alternate raw material suppliers but does not go into the details of these alternate sources or their relationship with the ordered item, specifically, Greamo does not teach a method that enables processing orders for one member item of a family of products by considering supply of all the plurality of member items in the family of products as recited in claim 1.

25 (Paragraphs 0041 of Greamo)

[0041] As illustrated in FIG. 2A, the commit system 100 uses an order commitment method 200. First the commit system 100 forms or accesses a supply chain, step 210. Second the commit system 100 receives a new order, step
30 220. Third the commit system 100 assesses the feasibility of orders, step 230. Fourth, where there is more than one option to fulfill the order, the commit system 100 may check availability of desired inventory to offer a low-cost solution to meet the order requirements (does not disrupt other orders) update supply chain, step 240. Optionally, the commit system attempts to either slightly modify the implementation of existing orders or to modify the requirements of the current order at issue, steps 250 and 260. Finally, the commit supply 100 may then repeat steps 210-240 with future orders, using supply chain data
40 adjusted in step 270.

(Paragraphs 0041 of Greamo)

In this paragraph of Greamo various steps in the order commitment method used to commit an order is described and according to one of the steps, the commit system checks availability of desired inventory or the commit system attempts to either slightly
5 modify the requirements of the existing orders or to modify the requirements of the current order at issue. There is no teaching or suggestion in these paragraphs of at least considering the availability of all the member items of the family of products to which the ordered item also belongs, in order to determine whether the order can be promised.

10 (Paragraphs 0044-0046 of Greamo)

[0044] In a preferred embodiment, in order to realistically promise delivery dates to customers, the commit system 100 further specifies the days on which
15 customers can accept shipments. Therefore, prior to inquiring on an order, **the customer may optionally specify what days are acceptable to receive the order... Then, the commit system 100 forms needed shipping dates by offsetting the delivery date by any appropriate transportation and inventory lead-times to the customer...**

20 [0046] Upon receiving a new order in Step 220, the commit system 100 accesses the supply chain data to determine if the new order may be satisfied given the existing conditions of the supply chain, step 230. The supply chain data can be accessed from the database 160. In step
25 230, the processing is limited. For instance, the processing may have a limited number of computations or a limited processing time.

30 (Paragraphs 0044-0046 of Greamo)

Paragraph 0044 of Greamo, in general describes forming shipping dates for shipment of the order to the customer and does not describe anything related to determining the quantity of items scheduled to be available as of the required date. According to paragraph 0043 of Greamo, the commit system considers days specified by
35 the customer on which, the customer can receive order shipments, and offsets the delivery dates by transportation and inventory lead-times. The teachings of this paragraph of Greamo do not appear to teach or reasonably suggest the above-recited feature of claim 1 according to which, a first available quantity of all plurality of member items scheduled to be available after the TF duration and as of the first required date and a second
40 available quantity of the first member item scheduled to be available as of the end of the TF duration is determined.

Paragraph 0046 of Greamo merely suggests accessing the supply chain data from the database and based on the existing conditions of the supply chain determining

whether the order may be satisfied. This paragraph does not have any additional disclosure on what are the existing conditions based on which the commit system determines that the order may be satisfied. More specifically, this paragraph does not disclose, as recited in claim 1, determining a first available quantity of all plurality of member items scheduled to be available after the TF duration and as of the first required date and a second available quantity of the first member item scheduled to be available as of the end of the TF duration and if it is determined that the first available quantity and second available quantity scheduled to be available as of the first required date is sufficient to fulfill the first required quantity then the system indicates that the order can be promised.

In view of the above comments, Applicants submit that Greamo does not disclose several features of claim 1 and claim 1 is allowable over Greamo.

Claims 2-20 depend from claim 1 and allowable over Greamo at least for the reasons stated above with respect to claim 1. The dependent claims are allowable for additional reasons. For example claim 10 recites:

The method of claim 9, further comprising:
computing in said computer system an aggregate of availability for said first member item for each day as of end of said ATF duration in order to compute said second available quantity
maintaining in said computer system said present family availability associated with each day after said ATF duration; and
computing a cumulative item availability for each day after the ATF duration as the sum of said second available quantity and aggregate of said present family availability as of that day,
wherein said determining comprises examining said cumulative item availability and said present family availability such that said determining can be performed quickly.

The Office Action alleges that paragraphs 0013, 0059, 0062 and 0063 teach the features of claim 10. Applicants respectfully disagree.

For example, paragraph 0013 of Greamo as discussed above with respect to independent claim 1 is related to a product promotion plan. Paragraph 0059, 0062, and 0063 of Greamo describe ship complete component that allows commit system 100 users to specify a single delivery date for all items of the order and the ship complete

component will calculate one ship date for all items of the order even when all the items are not available at the same time.

From these paragraphs of Greamo it appears that Greamo may be computing the date by which individual items of the order may be available in order to calculate a single delivery date by when all the orders of the ship complete may be shipped. In order to do this, Greamo may be determining the availability of the required quantities of the individual items of the order. However, this disclosure of Greamo is not sufficient to teach the claimed approach to determine the availability of the required quantities of an item of the order by a particular date, as is recited in detail in claim 10 (and in parent claim 9) for determining the availability of the first required quantity of the ordered first member item as of the required date. For example, there is no disclosure in these paragraphs of Greamo that the availability of the first required quantity is determined in two portions (as recited in claim 9): a) from the aggregate present family availability aggregate of all of the plurality of member items (of the family of products) available on each day after the ATF duration and as of the required date, and b) from the second available quantity of the first member item scheduled to be available as of end of ATF duration.

Currently amended independent claims 21, and 41 and their dependent claims are also allowable over Greamo at least for some of the reasons stated above with respect to independent claim 1 and the dependent claims.

Currently amended claim 61 is also allowable over Greamo for at least some of the reasons stated above for independent claim 1. Claim 61 is additionally allowable for reciting the limitation, "...wherein said means for said indicating further comprises means for allocating a maximum portion of said first required quantity from said first available quantity and allocating said first required quantity minus said maximum portion from said second available quantity".

Claims 62 to 80 depend from claim 61 and are allowable over Greamo for at least some of the reasons stated above with respect to independent claim 61.

The Examiner is invited to telephone the undersigned representative at 707.356.4172 if it is believed that an interview might be useful for any reason.

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Respectfully submitted,
/Narendra Reddy Thappeta/

Signature

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